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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,227	02/13/2004	Jean Geoffrion	275401.1	2508

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FASKEN MARTINEAU DUMOULIN, LLP
STOCK EXCHANGE TOWER, SUITE 3400
P.O. BOX 242, 800 PLACE VICTORIA
MONTREAL, QC H4Z 1E9
CANADA

EXAMINER	
KEEFER, MICHAEL E	

ART UNIT	PAPER NUMBER
2454	

MAIL DATE	DELIVERY MODE
08/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/777,227	GEOFFRION, JEAN	
	Examiner	Art Unit	
	MICHAEL E. KEEFER	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4 and 6-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 6-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the RCE filed 8/21/2008.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3-4, and 6-12, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia-Luna-Aceves et al. (US 683865), hereafter Garcia in view of Ahmed et al. (EP 1137224), hereafter Ahmed in further view of Doui et al. (US 20020141762), hereafter Doui.

Regarding **claims 1 and 16** Garcia discloses:

A method for establishing a communication link from a first processing unit located in a first network to a second processing unit located in a second network, through a wireless network comprising a plurality of nodes, said method comprising: (Fig. 1, Gateways are IR16d 16e, IR16A and IR16B, processing units are 22A-C, plus devices in internet 14 and subnet 12C)

in a first gateway, selecting one of a plurality of dynamic routes between the nodes to access a second gateway, the first gateway adapted for accessing the wireless network and said first processing unit, the second gateway adapted for accessing the wireless network and said second processing unit; and establishing a tunnel between the first gateway and the second gateway using the selected route to thereby establish said communication link. (Col. 11, lines 1-25 disclose finding a plurality of routes to a destination (the broadcast search can

return multiple routes), which the gateway which broadcast the search request can then use to directly route packets through the wireless network to its destination, i.e. a tunnel.)

Generating the dynamic routes using each of said plurality of nodes (since the search described in Col. 11 lines 1-25 will replicate searches throughout the entire network, all nodes are considered for dynamic routing.)

Garcia does not specifically disclose detecting a neighboring node, collecting data identifying the detected node, and transmitting the data.

Regarding **claim 3 as applied to claims 1-2**, Garcia discloses:

Broadcasting a request for route generation. (the router broadcasts the search request to all adjacent nodes.)

Regarding **claim 6**, Garcia discloses:

Performing a broadcast from the gateway wherein the generating is performed in response to the broadcast. (Col. 11, the router broadcasts the search request to all adjacent nodes, which reply with path data.)

Regarding **claims 9-10**, Garcia discloses:

Identifying paths based upon criteria, including bandwidth, reliability, or node cost. (Garcia discloses using the protocols in 09/418,700, now US 6836463, of which Col. 8 describes the information that nodes keep about themselves and other nodes, which includes types of service and the cost of using the nodes.)

Regarding **claim 11 as applied to claim 1**, Garcia discloses:

That the choice of path is determined based upon a criteria (Col. 10 lines 53-63 discloses that multiple routing entries for the same destination are provided, multiple entries may be provided for different types (classes) of service.)

Regarding **claim 12 as applied to claims 1 and 11**, Garcia discloses:

That the choice of path is determined based upon bandwidth, reliability and cost of using each node. (Col. 10 lines 53-63 discloses that multiple routing entries for the same destination are provided, multiple entries may be provided for different types (classes) of service, which may require certain bandwidth or cost metrics.)

Regarding **claims 14 and 15 as applied to claim 1**, Garcia discloses:

The first network comprises the internet (a WAN). (See Fig. 1, the internet)

Regarding **claim 17 as applied to claim 16**, Garcia discloses:

The wireless module comprises a point to point wireless communication module. (Col. 9 lines 43-52 discloses that the IRs are wireless communication devices.)

Regarding **claim 19, as applied to claim 16**, Garcia discloses:

A memory storing dynamically established routes between wireless nodes. (Col 10 lines lines 28-67 through Col 11 line 25) describe a variety of ways for the wireless nodes to store route information in memory)

Garcia discloses all the limitations of claims 1, 3-4, and 6-12, and 14-17 except for:

Updating the dynamic routes randomly in time (claims 4 and 7), the route generating protocol of claims 1, 6, and 8.

Ahmed teaches a routing protocol for use in mobile ad-hoc networks, which causes nodes to transmit information about themselves and their nearest neighbors to adjacent nodes. ([0031], note that both the link list (i.e. the nearest K neighbors) and information about each node is transmitted through the network.

Ahmed also teaches an route update method based off of a random (t1 and t2) period of time in [0034].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Garcia with Ahmed in order to reduce the size of routing tables by including fewer entries.

Garcia and Ahmed teach all the limitations of claims 1, 3-4, and 6-12, and 14-17 except for collecting IP address information.

The general concept of collecting IP address information is well known in the art as taught by Doui. (see at least [0055] which discloses the collection of IP addresses of detected nodes)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Garcia and Ahmed with the general concept of collecting IP address information as taught by Doui in order to reduce network traffic. (Doui, [0008])

3. **Claims 13 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, Ahmed, and Doui as applied to claims 1 and 16 above, and further in view of Tuomenoksa et al. (US 2002/0023210), hereafter Tuomenoksa.

Garcia, Ahmed, and Doui teach all of the limitations of claims 13 and 18 except for creating an encrypted tunnel between the gateways.

The general concept of creating encrypted tunnels between gateways is well known in the art as taught by Tuomenoksa. ([0186] teaches creating an encrypted tunnel between two gateways)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Garcia, Ahmed, and Doui with the general concept of creating encrypted tunnels between gateways as taught by Tuomenoksa in order to increase security.

4. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, Ahmed, and Doui as applied to claim 16 above, and further in view of Official Notice.

Garcia, Ahmed, and Doui do not explicitly teach that LAN 20, the link between router 18 and Internet 14, or LAN 26 are Ethernet links.

The Examiner takes Official notice that the general concept of using Ethernet as a LAN protocol or as a link into the Internet is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Garcia, Ahmed, and Doui with the general concept that Ethernet is a well-known LAN and Internet layer 1 protocol in order to make the network more standardized.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 3-4, and 6-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 8/10/2009

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2454